

- Coriolis acceleration

$$\vec{a}_p = \vec{a}_o + \frac{{}^b d^2}{dt^2} \vec{r} + \boxed{2\vec{\omega}_{ib} \times \frac{{}^b d}{dt} \vec{r}} + \boxed{\vec{\alpha}_{ib} \times \vec{r}} + \boxed{\vec{\omega}_{ib} \times (\vec{\omega}_{ib} \times \vec{r})} \quad (1)$$

- Transversal acceleration

- Centripetal acceleration